

ARCE Events 2018: The 10th National Symposium of Bariatric and Metabolic Surgery, The 1st National Symposium Of Robotic Surgery

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On November 23rd to 24th, 2018, the Romanian Association for Endoscopic Surgery (ARCE) proudly hosted at World Trade Center, Bucharest, Romania, a group of events dedicated to minimal invasive surgery: the 10th National Symposium of Bariatric and Metabolic Surgery, the 1st National Symposium of Robotic Surgery, alongside with a Masterclass on Robotic Assisted Surgery for Pelvic Oncology Pathology and a Hands-on Workshop on Ultrasound for surgeons.

The Events' theme underlined the importance of team work and integrative technology in order to obtain a better care for patients.

The Event was directed by Prof. Dr. Catalin Copaescu, president of ARCE, being organized by the Romanian Association for Endoscopic Surgery and Interventional Techniques (ARCE) in collaboration with the Association for Bariatric Surgery and for the Complex Treatment of Obesity and Surgical Training Institute.

ARCE offered 60 scholarships to young surgeons interested in the development of advanced minimally invasive surgery. Overall, the scientific meeting brought together more than 200 participants, 57 speakers and 66 presentations .

The Opening Ceremony has proven the significance of the event for minimally invasive surgery in Romania. There were present and spoke to the participants: Mrs Sorina Pinte, Ministry of Health, Conf. dr. Diana-Loreta Paun, Health Conciler of the Romanian President, Prof. dr. Irinel Popescu, President of the Romanian Academy of Medical Science, Prof. dr. Alexandru Blidaru

2. Prof. dr. Ciprian Duta, Prof. dr. Viorel Jinga, vice-rector of Carol Davila University of Medicine and Pharmacy, Prof. dr. Adrian Saftoiu, President of the Romanian Society of Coloproctology, Prof.dr. Nicolae Suci, President of Romanian Society of Minimally Invasive Surgery in Gynecology. The opening Ceremony has ended with two very interesting lectures about “the Actual and Future role of Artificial Intelligence in Healthcare”, presented by L. Pengo, (Microsoft Europe) and about “The novel Robot MazorX for Spine Surgery” presented by M. Isac (Medtronic Europe).

The First National Symposium of Robotic Surgery

The First National Symposium of Robotic Surgery marked the launch of the Romanian Robotic Surgery Club, a RAES chapter which aims to bring together the surgeons with particular interest in the field of robotic surgery from Romania.

The Symposium joined together surgeons from Romania as well as from other European countries who presented their experience in this innovative field of surgery. The meeting was a good opportunity for reporting the newest achievements in the field of the robotic surgery, which were presented by the experienced teams from Romania as well as from the other countries but also for reporting the initial results from the hospitals where robotic surgery has been recently implemented.

Among the speakers we are glad to nominate experts from Romania such as Prof. Dr. Irinel Popescu (Bucharest), Prof. Dr. Ioan Coman (Cluj), Prof. Dr. Ciprian Duta (Timisoara), Prof. Dr. Catalin Copaescu (Bucharest), Dr. Mircea Onaca (Bucharest) as well as from Greece (Pantelis Antonakis, Vasileios Sioulas, Stavros Tyrizis and Savvas Hirides from Athens), Bulgaria (Grigor Gortchev, Slavcho Tomov from Pleven), Switzerland (Ralf Senner from Zurich) and from France (Pierre Monod from Grenoble).

Maybe the most interesting topics debated during this Symposium were related to the actual indications of robotic surgery in gynecologic oncology, in hepatobilio-pancreatic,

thoracic, abdominal wall, metabolic as well as in pediatric and urological surgery.

Therefore, the event was opened by the paper presented by Ralf Senner from Zurich who presented an 18 year experience of robotic bariatric surgery in Switzerland. Later on, papers focussing the benefits of robotic surgery as compared to laparoscopic surgery for abdominal wall repair as well as for the rectal cancer were debated by the teams from Greece and Romania.

The second session of the symposium brought into the attendees' attention the feasibility and efficacy of the robotic approach for the retroperitoneal space, and included elements of renal and pancreatic surgery.

The feasibility of sentinel lymph node biopsy in onco-gynecology was demonstrated by the presentation of Vasileios Sioulas from Athens, Greece, who presented a video demonstration of Indocyanine Green sentinel node mapping followed by biopsy using a robotic approach. Going further on the theme of the robotic approach in onco-gynecology, Slavcho Tomov demonstrated the benefits of robotics when compared to laparoscopic and open approach in endometrial cancer patients while Mircea Onaca reported an interesting case in which the robotic approach was used in order to repair a vesico-vaginal leak. The end of the session was marked by the presentations demonstrating the feasibility, efficacy as well as the possible ways of optimization of the robotic approach in urology, especially when it comes to the radical prostatectomy.

The hints of how a national program of robotic surgery should be implemented were offered during the last session by Pierre Monod from Grenoble, France, while Prof. Irinel Popescu pointed out the general indications of the robotic approach in visceral surgery.

During the next presentation, Prof Dr I. Coman pointed out the evolution of the laparoscopic approach from 2D to 3D and further on, to robotics. In the same session, Prof. Dr. C. Copaescu demonstrated the benefits of robotics in difficult surgical cases to be approached in a standard minimally invasive

manner while the team from Pleven, Bulgaria pointed out the results of a 10 years analysis of robot assisted radical hysterectomy in cervical cancer patients.

The Masterclass on Robot Assisted Surgery for Pelvic Oncology Pathology was organized on November, 24th, 2018. During the masterclass the benefits of robotic surgery in oncogynecology were discussed by G. Gortchev (in early stage cervical cancer patients) and by S. Tomov (in early stage endometrial cancer) while the effectiveness of robotics in urology were presented by M. Onaca (in a video presentation regarding the feasibility of a totally intracorporal ileal neobladder after radical cystectomy for locally invasive urinary bladder cancer). As expected, an interesting debate regarding the role of sentinel lymph node biopsy in oncogynecology started after the presentations sustained by the two Bulgarian speakers.

The Hands-on Workshop of Ultrasound for Surgeons, took place on November, 24th, it was directed by dr.Calin Tiu (Romania) and Andreas Meltzer (Germany) together with a prestigious faculty, naming among them: Dr Gerald Filip, Dr Bogdan Socea, Dr.Alexandru Carâp and it was highly appreciated by the participants. The new modules on US in Trauma and US guided punctures were very attractive.

The 10th National Symposium of Bariatric and Metabolic Surgery

The event was endorsed by the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO).

The National Symposium of Bariatric and Metabolic Surgery had an important role in the last decade in the evolution of minimal invasive bariatric procedures and had both educational and scientific importance in understanding the complex pathology of obesity and created better strategies for the attempt of decreasing the associated complications. This year scientific sessions, together with the first life IFSO-EC webinar provided the new trends in minimal invasive bariatric surgery.

The participation of Jérôme Dargent the President of the 2019 IFSO-EC Congress in Lyon, France and vice-president of the French Society of Obesity Surgery (SOFFCO-MM) added great value to the discussions regarding surgical novelties and basic research. Another important guest was Profesor Bassem Safadi, a specialist in bariatric surgery well known in the Middle East. He teaches at the Lebanese University of Beirut, School of Medicine and is the Chairman of the Department of Surgery.

Jérôme Dargent underlined the fact that endoscopic procedures have been well-documented in the obesity field, but have not yet reached a sufficient level of evidence as stand-alone methods for treating obesity. It is unclear if they should take over. Although expanding, the array of bariatric surgical techniques does not fully meet its current needs. For the time being, relevant endoscopic methods include intra-gastric balloons, gastric partitioning (Endo-plication), and the metabolic field (Endo-barrier). Conditions have been listed for implementation of bariatric endoscopy, because innovation is risky, expensive, and faces ethical challenges. A scientific background is being built, for example hormonal studies. Some techniques require additional studies, while others are not ready but should be priorities. Endoscopic bariatric techniques are not ready for prime time, but they are already being successful as revisions of different metabolic procedures. A time-frame for step-strategies can be defined, and more investments from the industry are mandatory.

The actual recommendations for conservative treatment of obesity were discussed by A. Sirbu (Bucharest), the pitfalls in clinical evaluation of the candidates to bariatric surgery, by I. Hutopilă (Bucharest) and the peri-operative considerations in ERAS by B. Safadi (Beirut). The question that arises from these discussions is “which patients should be offered bariatric surgery?”. There are a lot of evidence, that patients with BMI of 30–34.9 kg/m² with diabetes or metabolic syndrome may also be offered a bariatric procedure. However, all patients should undergo pre-operative evaluation for obesity-related co-

morbidities and causes of obesity, with special attention directed to those factors that could affect a recommendation for bariatric surgery. The preoperative evaluation must include a comprehensive medical history, psychosocial history, physical examination and appropriate laboratory testing to assess surgical risk.

Another important aspect is the psychological analysis of the patient. It is generally accepted that weight loss has significant physiological benefits, such as reduced risk of diabetes, lowered blood pressure and blood lipid levels. However, few behavioural and dietary interventions have investigated psychological benefit as the primary outcome. Hence, systematic review methodology was adopted to evaluate the psychological outcomes of weight loss following participation in a behavioural and/or dietary weight loss intervention in overweight/obese populations. Changes in self-esteem, depressive symptoms, body image and health related quality of life were evaluated and discussed. Further research is required to improve the quality of studies assessing the benefits of weight loss to fully elucidate the relationship between weight loss and psychological outcomes, as dr. M. Buza (Bucharest) underlined in her presentation.

Medical and behavioral intervention as treatment for obesity in childhood remains largely ineffective: 5-10 % weight loss within 2 years rarely results in significant durable success. To date, a range of different types of bariatric procedures has been performed in adolescents, but studies evaluating and analysing preoperative data, postoperative course and follow-up in a representative number of patients younger than 18 years are still lacking. Nevertheless, current experience suggests significant weight loss and improving obesity-related medical comorbidities after bariatric surgery in adolescents too. Moreover, bariatric surgery in adolescents seems to induce less complications and a shorter hospital stay than in adults. Although surgical therapy for obesity in this group of patients remains an individual decision, even though explicit guidelines have been published specifying inclusion and exclusion criterias.

Improved glucose metabolism following bariatric surgery is associated with increased circulating bile acid concentrations and remodeling of the gut microbiome as A. Dobrescu (Timisoara) and F. Catoi Galea (Cluj) showed in their studies. Clinical studies have indicated that circulating bile acid (BA) concentrations increase following bariatric surgery, especially following malabsorptive procedures such as Roux-en-Y gastric bypasses. Moreover, total circulating BA concentrations in patients following RYGB are positively correlated with serum glucagon-like peptide-1 concentrations and inversely correlated with postprandial glucose concentrations. Overall, these data suggest that the increased circulating BA concentrations following bariatric surgery - independently of calorie restriction and body-weight loss - could contribute, at least in part, to improvements in insulin sensitivity, incretin hormone secretion, and postprandial glycemia, leading to the remission of type-2 diabetes. In humans, the primary and secondary BA pool size is dependent on the rate of biosynthesis and the enterohepatic circulation of BAs, as well as on the gut microbiota, which play a crucial role in BA biotransformation. Moreover, BAs and gut microbiota are closely integrated and affect each other. The objective of these studies is to discuss in detail the results that show how bariatric surgery affects glucose metabolism and subsequently type 2 diabetes remission.

Based on similarities between overconsumption of food and addictive drugs, there is increasing interest in "food addiction," a compulsive eating pattern defined using symptoms parallel to substance use disorders as R. Senner (Zurich) and D. Timofte (Iasi) had underlined in their presentations. Another important issues were discussed, like the role of ICG in metabolic surgery by S. Filip (Bucharest) and the importance of collaboration between bariatric surgeons and surgical oncologists in resolving difficult cases-aspect underlined by B. Safradi (Beirut).

Bariatric surgery is an effective treatment for severe obesity, however, postoperative venous thromboembolism remains a leading

cause of morbidity and mortality as D. Godoroja (Bucharest) presented. Portomesenteric vein thrombosis after LSG is an infrequent complication that can lead to serious consequences. The complications after gastric sleeve were also widely discussed.

Despite the multiple advantages, SG also has specific complications such as bleeding, stenosis (the paper "Endoscopic Management of Stenosis after Bariatric Surgery" by F. Turcu), portal thrombosis and leak. The staple line leak at the oesophagogastric junction is the most feared complication and its prevention remains difficult, as the involved mechanisms have been only partially elucidated. Its management is long and requires a multidisciplinary technical platform including Intensive Care Unit, digestive endoscopy and interventional radiology (the paper "Role of endoscopy in the management of a postoperative leak after LSG" by V. A. Mercea) as well as a specialised surgeon. An interesting case-presentation regarding gastrobronchial fistula showed feasible methods of diagnostic and therapeutical solutions in these rare complication after LSG-presented by D. Andrei (Bucharest).

Another key point of the Symposium was the first IFSO-EC webinar entitled "The effect of hiatal hernia repair on gastroesophageal reflux after sleeve gastrectomy" moderated by C. Copaescu (Romania) and J. Dargent (France). The topic was discussed by Paola Iovino (Naples), Luigi Angrisani (Naples) and B. Safradi (Lebanon).

Other interesting presentations were presenting the results of redo-surgery as conversion from gastric banding to laparoscopic Roux-en-Y gastric bypass-a comparative analysis of 885 patients by J. Colpaert, Bruno Dillemans (Bruges, Belgium), laparoscopic conversion of gastric sleeve to biliopancreatic diversion with duodenal switch by S. Filip (Bucharest) and laparoscopic gastric bypass redo after VBG- a video presentation by B. Smeu (Bucharest).

Patients with esophageal disease were classified as gastroesophageal reflux disorder (GERD) or other, which included achalasia,

esophagitis, reflux esophagitis, Barrett's esophagus, and multiple esophageal diagnoses, excluding GERD. The prevalence of esophagitis increased significantly 1 year after surgery. Since we do not fully understand the long-term impact of chronic esophagitis in post-sleeve population, the strong recommendation is to follow-up EGD assessment post-operatively and treat the esophagitis if present. Another aspect is de novo-GERD which consists of around half of pre-operative silent GERD and most patients with pre-operative silent GERD became symptomatic after surgery. 3 years results of Narbona Arnau procedure to control the GERD after LSG - a prospective study by I. Hutopilă (Bucharest) presented some aspects about this important postoperative issue. Another debated theme was the management of hypoglycemia after sleeve gastrectomy by R. Plesea (Bucharest) and results of side to side jejunioileal anastomosis in low BMI patients with type 2 diabetes mellitus by E. Taskin (Istanbul). Bariatric surgery is the most effective treatment for morbidly obese type II diabetics. However, guidelines for perioperative glucose control are not well established. Shorter diabetes duration, lower fasting glycemia before surgery, and GD versus GO procedures independently predict higher rates of remission, whereas baseline HbA1c and waist circumference predict improved glycemic control. The results show the advantage of an early operation together with better controlled glycemia on diabetes remission independently of BMI.

After two days of spectacular presentations and discussions, the Closing Ceremony of the 10th National Symposium of Bariatric and Metabolic Surgery and the 1st National Symposium of Robotic Surgery delivered a fitting tribute to the remarkable surgical feats, extraordinary teamwork and marvelous surgical community participation.

Looking forward to meet you at the next ARCE Congress which will be held on November, 21-24th, 2019 at Willbrook Congress Center, Bucharest, Romania.